

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of claims:**

Claims 1-35 (canceled)

Claim 36 (new): A *Flavobacterium heparinum* host cell transformed with a recombinant DNA expression vector selected from the group consisting of pIBFX1 and pIBFX2.

Claim 37 (new): The host cell of claim 36, wherein said recombinant DNA is integrated into the *Flavobacterium heparinum* chromosome.

Claim 38 (new): The host cell of claim 37, wherein said recombinant DNA is integrated through homologous recombination.

Claim 39 (new): The host cell of claim 37, wherein a gene in said integrated DNA is expressed at high levels.

Claim 40 (new): The host cell of claim 36, wherein said recombinant DNA is introduced into said cell by conjugation.

Claim 41 (new): A *Flavobacterium heparinum* host cell transformed with a recombinant DNA expression vector effective to cause expression of at least one protein encoded by a homologous or heterologous coding sequence selected from the group consisting of heparinase I, heparinase II, and heparinase III, wherein said expression vector is selected from the group consisting of pIBFX1 and pIBFX2.

Claim 42 (new): A *Flavobacterium heparinum* host cell transformed with a recombinant DNA expression vector effective to cause expression of at least one selectable marker protein encoded by a homologous or heterologous coding sequence, wherein said expression vector is selected from the group consisting of pIBFX1 and pIBFX2.

Claim 43 (new): A *Flavobacterium heparinum* host cell transformed with a recombinant DNA expression vector regulated by a regulatory region effective in *Flavobacterium heparinum*, wherein said expression vector is selected from the group consisting of pIBFX1 and pIBFX2.

Claim 44 (new): A *Flavobacterium heparinum* host cell transformed with a recombinant DNA expression vector effective to cause expression of at least one protein encoded by a homologous or heterologous coding sequence selected from the group consisting of heparinase I, heparinase II, heparinase III, and selectable markers, regulated by a regulatory region effective in *Flavobacterium heparinum*, wherein said expression vector is selected from the group consisting of pIBFX1 and pIBFX2.

Claim 45 (new): An expression system for expressing a desired polypeptide or protein comprising a *F. heparinum* host organism; nucleotide sequences encoding at least one desired polypeptide or protein selected from the group consisting of heparinase I, heparinase II, heparinase III, and selectable markers; and an expression vector for expressing the nucleotide sequences capable of expressing the desired polypeptide or protein, wherein the expression vector is selected from the group consisting of pIBFX1 and pIBFX2.

Claim 46 (new): An expression system for expressing a desired polypeptide or protein comprising a *F. heparinum* host organism; nucleotide sequences encoding at least one desired

polypeptide or protein selected from the group consisting of heparinase I, heparinase II, heparinase III, and selectable markers; and an expression vector for expressing the nucleotide sequences capable of expressing the desired polypeptide or protein, wherein said selectable markers are encoded by an expression vector selected from the group consisting of pIBFX1 and pIBFX2.